Fertilizer Research **35:** 251–252, 1993.

CONTENTS Volume 35 1993

Volume 35 Nos. 1–2

Special issue: **Controlled-release phosphorus and sulphur fertilizers**
Scientific editors: **N.S. Bolan and S.S.S. Rajan**

Preface v
N.S. Bolan, S.S.S. Rajan

Controlled-release fertilizers to increase efficiency of nutrient use and minimize environmental degradation – A review 1
A. Shaviv, R.L. Mikkelsen

Preparation, forms and properties of controlled-release phosphate fertilizers 13
N.S. Bolan, M.J. Hedley, P. Loganathan

Phosphate rocks and partially-acidulated phosphate rocks as controlled release P fertilizers 25
J. Hagin, R. Harrison

Use of phosphate rocks in the tropics 33
P.W.G. Sale, A.U. Mokwunye

Use of partially acidulated phosphate rocks as phosphate fertilizers 47
S.S.S. Rajan, B.C. Marwaha

Application of the Kirk and Nye phosphate rock dissolution model 61
G.C. Anderson, P.W.G. Sale

Evaluation of soil phosphate status where phosphate rock based fertilizers have been used 67
K.W. Perrott, S. Saggar, R.G Menon

Summary of research on soil testing for rock phosphate fertilizers in Western Australia 83
M.D.A. Bolland

Solubility assessment for fertilizer containing phosphate rock 93
S.H. Chien

Factors affecting the oxidation of elemental sulfur in soils 101
J.J. Germida, H.H. Janzen

Modelling the oxidation of elemental sulfur in soils 115
J.H. Watkinson, G.J. Blair

Elemental sulfur fertilizers and their use on crops and pastures 127
C.C. Boswell, D.K. Friesen

Volume 35 No. 3

Phosphorus seed coating increases phosphorus uptake, early growth and yield of pearl millet (*Pennisetum glaucum* (L.) R. Br. grown on an acid sandy soil in Niger, West Africa 151
F.-P. Rebafka, A. Bationo, H. Marschner

Obtaining granular NPK fertilizers from single superphosphate and urea 161
E. Aasamäe, E. Arumeel, M. Einard, M. Veiderma

Computer program for the mass and heat balance calculations for the wet process phosphoric acid (hemi-hydrate) and its applications to Saudi phosphate rock 169
T.F. Al-Fariss, S.M. Abdul Razik, N.M. Ghasem, F.A. Abdelaleem, S.S.E.H. Elnashaie

Recycling of nutrients in Japanese mint – assessment of soil fertility and crop yield 177
A. Chattopadhyay, K. Subrahmanyam, D.V. Singh

A comparison of sequential extraction procedures for measuring phosphate rock residues in soils 183
D. Tambunan, M.J. Hedley, N.S. Bolan, M.A. Turner

Impact of inorganic fertilizer availability on land use and agricultural production in the Fifth Region of Mali. I. Methodology and basic data 193
N. van Duivenbooden, F.R. Veeneklaas

Impact of inorganic fertilizer availability on land use and agricultural production in the Fifth Region of Mali. II. Scenario definition and results 205
N. van Duivenbooden

Fertilization of millet cv. Souna III in Senegal: dry matter production and nutrient uptake 217
N. van Duivenbooden, L. Cissé

Calculating soil nutrient balances in Africa at different scales. I. Supra-national scale 227
J.J. Stoorvogel, E.M.A. Smaling, B.H. Janssen

Calculating soil nutrient balances in Africa at different scales. II. District scale 237
E.M.A. Smaling, J.J. Stoorvogel, P.N. Windmeijer

Volume contents 251

Author index 253

Instructions to authors 255